LTC 510x Series 4- and 8- position Premium Sequential Switchers

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Invented for life

- Microprocessor-based
- On-screen status line and setup menus
- 16 character camera titles
- Programmable dwell times and alarm dwell/capture time
- Automatic termination

The LTC 5104 Series and LTC 5108 Series are automatic sequential video switchers. The LTC 5104 Series have 4-camera inputs and 1-monitor output; the LTC 5108 Series have 8-camera inputs and 2-monitor outputs. All models are microprocessor-based.

Functions

The auto-terminating BNC connectors eliminate the need for the user to select a 75 Ohm terminated video input or high impedance, un-terminated video input with looping video output. The switcher sets itself correctly for either situation. The looping video output allows another piece of equipment to be connected to the same video line.
Features include a 16-character camera title, nonvolatile memory back-up, on-screen status line, on-screen configuration menus in English, French, German, and Spanish (11 for the LTC 5104 Series and 12 for the LTC 5108 Series), and a SMART Setup. The status line displays the present camera number, the operation status, and camera title. There are five operation status notations:

- S – skipped camera displayed
- RUN – sequence running
- MA – monitor armed
- ALARM – alarm closure call-up
- HOLD – camera held.

The Configuration Menus include Dwell Adjust, Operating Mode (LTC 5108 Series only), Alarm Reset Mode, Alarm Capture, Capture Time, Alarm Dwell Time, Alarm Contacts Option, Status Line, Brightness and Background of titles, Display Position, System Reset, and Camera Title. The VideoSearch™ feature detects any camera inputs without video and sets them to be skipped.
These versatile switchers provide individually or globally adjustable camera dwell times from 1 to 64 seconds. Automatic camera call-up can be activated by motion detectors or remote alarm closures. Alarm contact can be selected either normally-open or normally-closed. Alarms override normal operating mode to home on alerted camera. Vertical interval switching gives roll-free viewing. An alarm output is provided to activate a VCR to record alarms. The minimum time that an alarm will be held once triggered (unless cleared or the alarm input is

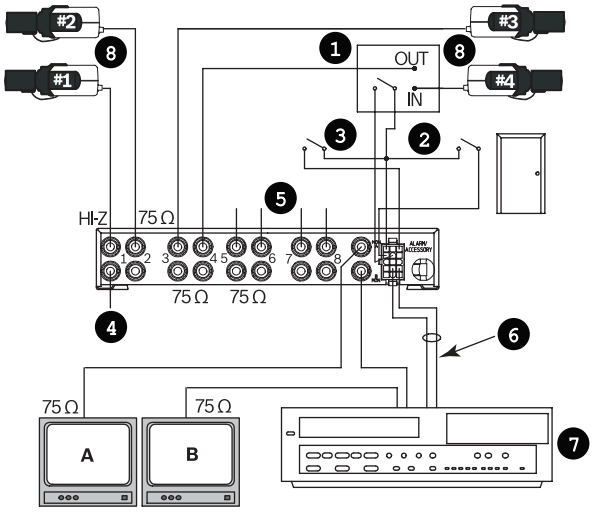
disabled) can be set to 1 to 63 seconds. Sequencing through multiple alarms can be set to occur at a dwell of 1 to 64 seconds.
Two modes of operation can be selected for the LTC 5108 Series switchers. The two modes only affect Monitor B; Monitor A continuously sequences regardless of mode. In the Sequencing Mode, Monitor B will show either an alarm call up of a camera, a camera under a HOLD condition or normal sequencing of cameras. In the Blanking Mode, Monitor B will show either an alarm call-up of a camera, a camera under a HOLD condition or a blank screen.
Simple front panel controls insure easy operation. They include: a dwell button for a dwell adjust menu; select buttons to select each channel; a skip/clear button to skip channels or to clear alarms; an alarm button to arm the monitor (Monitor B for the LTC 5108 Series); and a run button to initiate auto-sequencing or to select the next camera in the sequence.
Supplied as compact desktop units, these switchers can also be mounted with a rack-mount kit. A 609 mm (24 in.) cable with 15-pin connectors is provided for connecting a motion detector or remote alarm closures to the switcher.

Certifications and Approvals

Electromagnetic Compatibility (EMC)	Complies with FCC Part 15, ICES-003 and CE regulations
Product Safety	Complies with CE regulations, UL, CSA, EN and IEC Standards

Region	Certification

Installation/Configuration Notes



Typical Installation Using LTC 5108 Series Switcher

1 Motion Detector
2 Door Switch
3 Smoke Detector
4 To Terminated Auxiliary Monitor or Terminated Switcher
5 Additional Cameras
6 Alarm Output Relay Closure
7 Video Recorder
8 Cameras

Monitor A

Sequencing Mode

1. Normal sequencing of camera inputs

Blanking Mode

1. Normal sequencing of camera inputs

Monitor B

Sequencing Mode

1. Normal sequencing (same as Monitor A)
2. "HOLD" condition
3. "ALARM" condition

Blanking Mode

1. Blank screen
2. "HOLD" condition
3. "ALARM" condition

Technical Specifications

Electrical

Model No.[1]	Rated Voltage	Voltage Range	Power at Rated Voltage
LTC 5104/60	120 VAC, 50/60 Hz	105 to 130	4 W
LTC 5104/50	230 VAC, 50/60 Hz	198 to 264	4 W
LTC 5108/60	120 VAC, 50/60 Hz	105 to 130	4 W
LTC 5108/50	230 VAC, 50/60 Hz	198 to 264	4 W

1) Models shown are for English on-screen menus model.

Switching Time	Less than 1 µs
Dwell Time	Each camera individually or globally set from 1 sec. to 64 sec.
Alarm Dwell Time	1 sec. to 64 sec.
Alarm Capture Time	1 sec. to 63 sec.
Video Gain	Unity

Bandwidth (–3 dB point)	
	5 MHz minimum

Differential Gain	1% typical
Differential Phase	1°
Video Crosstalk (Input to Input Isolation)	
	–50 dB typical at 3.58 MHz
Video Feedthrough (Input to Output Isolation)	
	–65 dB typical at 3.58 MHz
Memory Back-Up	Nonvolatile memory back-up
Controls	
Front Panel	Momentary Push Button Controls: DWELL, SKIP/CLR, ALARM, RUN/NEXT, each video input
Internal	Video input has automatic termination
Indicators	ALARM, RUN/NEXT, each video input
Titling	16 character camera titling
Connectors	
Video Inputs	
0.5 Vp-p to 2 Vp-p	
LTC 5104 Series	Four (4) inputs; 8 BNC connectors
LTC 5108 Series	Eight (8) inputs; 16 BNC connectors
Video Outputs	
LTC 5104 Series	One (1), BNC 75 Ohm
LTC 5108 Series	Two (2), BNC 75 Ohm
Alarm Inputs	
LTC 5104 Series	Four (4)
LTC 5108 Series	Eight (8)
Alarm Outputs	
Isolated contact closures 1 A, 40 VAC/DC	
Accessory Output	One 15-pin alarm/accessory connector.

Mechanical

Cable (Included)	One cable with a 15-pin connector
Finish	Gray
Dimensions (W x D x H)	223 x 280 x 40 mm (8.77 x 11.0 x 1.59 in.)
Weight	2 kg (4.5 lb)

Environmental

Temperature	
Operating	–18°C to 50°C (0°F to 122°F)
Storage	–40°C to 60°C (–40°F to 140°F)
Humidity	10% to 80% relative, non-condensing
Vibration	3 g swept sine wave, 15 Hz to 2000 Hz
Shock	50 g, 11 ms, 1/2 sine
Options	
LTC 9101/00 Rack Kit	For mounting one or two units in an EIA 22.86 cm (9 in.) rack
Height	One (1) standard rack unit
Width	One (1) standard rack unit

Ordering Information

LTC 5104/50 4-position Premium Sequential Switchers
4 camera input, 1 monitor output, 230 VAC, 50 Hz
Order number **LTC 5104/50**

LTC 5104/60 4-position Premium Sequential Switchers
4 camera input, 1 monitor output, 115 VAC, 60 Hz
Order number **LTC 5104/60**

LTC 5104/51 4-position Premium Sequential Switchers - French
4 camera input, 1 monitor output, 230 VAC, 50 Hz
Order number **LTC 5104/51**

LTC 5108/50 8-position Premium Sequential Switchers
8 camera input, 2 monitor output, 230 VAC, 50 Hz
Order number **LTC 5108/50**

LTC 5108/51 8-position Premium Sequential Switchers - French
8 camera input, 2 monitor output, 230 VAC, 50 Hz
Order number **LTC 5108/51**

LTC 5108/60 8-position Premium Sequential Switchers
8 camera input, 2 monitor output, 115 VAC, 60 Hz
Order number **LTC 5108/60**

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